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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,957	11/20/2003	Shiva P. Singecetham	2065.001900	9015
23720	7590	05/25/2006	EXAMINER	
WILLIAMS, MORGAN & AMERSON			DUNWOODY, AARON M	
10333 RICHMOND, SUITE 1100				
HOUSTON, TX 77042			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/717,957	SINGEETHAM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Aaron M. Dunwoody	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 3/13/2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-69 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US Patent Application Publication US 2001/0045286 A1, Pallini et al.

In regards to claim 1, in Figures 2 and 3, Pallini et al disclose a connector, comprising:

a first end adapted to be coupled to a first component (15);

a plurality of locking segments (51) that, when actuated, are adapted to secure the first component to a second component (13); and

a locking mandrel (25) that, when actuated, is adapted to engage each of the plurality of locking segments at least three discrete, spaced apart engagement areas.

In regards to claim 2, Pallini et al disclose at least one of the engagement areas being a substantially flat engagement area defined by the engagement of substantially flat surfaces.

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In regards to claim 3, Pallini et al disclose all of the engagement areas being substantially flat engagement areas defined by the engagement of substantially flat surfaces.

In regards to claim 4, Pallini et al disclose at least one of the engagement areas being a tapered engagement area defined by the engagement of tapered surfaces.

In regards to claim 5, Pallini et al disclose all of the engagement areas being tapered engagement areas defined by the engagement of tapered surfaces.

In regards to claim 6, Pallini et al disclose the first end being threadingly coupled to the first component.

In regards to claim 7, Pallini et al disclose the first component being comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.

In regards to claim 8, Pallini et al disclose the second component being comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.

In regards to claim 9, Pallini et al disclose at least one indicator rod that being operatively coupled to the locking mandrel and adapted to indicate a position of the locking mandrel.

In regards to claim 10, Pallini et al disclose each of the plurality of locking segments comprises:

a first primary locking shoulder that is adapted to engage a first surface on the first component; and

a second primary locking shoulder that is adapted to engage a second surface on the second component.

In regards to claim 11, Pallini et al disclose each of the plurality of locking segments further comprises:

a first secondary shoulder on the locking segment that is adapted to engage a first secondary shoulder on the first component; and

a second secondary shoulder on the locking segment that is adapted to engage a second secondary shoulder on the second component.

In regards to claim 12, Pallini et al disclose the first primary locking shoulder and the first surface on the first component being tapered surfaces.

In regards to claim 13, Pallini et al disclose the second primary locking shoulder and the second surface on the second component being tapered surfaces.

In regards to claim 14, Pallini et al disclose the locking mandrel comprises a plurality of recesses, each of which is adapted to receive a protrusion on the locking segments when the locking segments are in a disengaged position.

In regards to claim 15, Pallini et al disclose each of the locking segments is comprised of a downwardly facing surface that is adapted to engage an upwardly facing surface on the locking mandrel when the locking mandrel is actuated to disengage the connector.

In regards to claim 16, Pallini et al disclose the locking mandrel is operatively coupled to a primary piston.

In regards to claim 17, Pallini et al disclose a secondary release piston positioned below the primary piston, the secondary release piston adapted to, when actuated, cause the primary piston to move.

In regards to claim 18, Pallini et al disclose a connector, comprising:

a first end adapted to be coupled to a first component;

a plurality of locking segments that, when actuated, are adapted to secure the first component to a second component; and

a locking mandrel that, when actuated, is adapted to engage each of the plurality of locking segments at least two discrete, spaced apart substantially flat engagement areas, wherein the substantially flat engagement surfaces are substantially parallel to an axis of the first and second components when mated.

In regards to claim 19, Pallini et al disclose the connector is engaged at least three discrete, spaced apart substantially flat engagement areas.

In regards to claim 20, Pallini et al disclose the first end is threadingly coupled to the first component.

In regards to claim 21, Pallini et al disclose the first component is comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.

In regards to claim 22, Pallini et al disclose the second component is comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.

In regards to claim 23, Pallini et al disclose at least one indicator rod that is operatively coupled to the locking mandrel and adapted to indicate a position of the locking mandrel.

In regards to claim 24, Pallini et al disclose each of the plurality of locking segments comprises:

- a first primary locking shoulder that is adapted to engage a first surface on the first component; and

- a second primary locking shoulder that is adapted to engage a second surface on the second component.

In regards to claim 25, Pallini et al disclose each of the plurality of locking segments further comprises:

- a first secondary shoulder on the locking segment that is adapted to engage a first secondary shoulder on the first component; and

- a second secondary shoulder on the locking segment that is adapted to engage a second secondary shoulder on the second component.

In regards to claim 26, Pallini et al disclose the first primary locking shoulder and the first surface on the first component are tapered surfaces.

In regards to claim 27, Pallini et al disclose the second primary locking shoulder and the second surface on the second component are tapered surfaces.

In regards to claim 28, Pallini et al disclose the locking mandrel comprises a plurality of recesses, each of which is adapted to receive a protrusion on the locking segments when the locking segments are in a disengaged position.

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In regards to claim 29, Pallini et al disclose each of the locking segments is comprised of a downwardly facing surface that is adapted to engage an upwardly facing surface on the locking mandrel when the locking mandrel is actuated to disengage the connector.

In regards to claim 30, Pallini et al disclose the locking mandrel is operatively coupled to a primary piston.

In regards to claim 31, Pallini et al disclose a secondary release piston positioned below the primary piston, the secondary release piston adapted to, when actuated, cause the primary piston to move.

In regards to claim 32, Pallini et al disclose a connector, comprising:

a first end adapted to be coupled to a first component;

a plurality of locking segments that, when actuated, are adapted to secure the first component to a second component; and

a locking mandrel that, when actuated, is adapted to engage each of the plurality of locking segments at three discrete, spaced apart, substantially flat engagement areas.

In regards to claim 33, Pallini et al disclose the first end is threadingly coupled to the first component.

In regards to claim 34, Pallini et al disclose the first component is comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.



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In regards to claim 35, Pallini et al disclose the second component is comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.

In regards to claim 36, Pallini et al disclose at least one connector rod that is operatively coupled to the locking mandrel and adapted to indicate a position of the locking mandrel.

In regards to claim 37, Pallini et al disclose each of the plurality of locking segments comprises:

a first primary locking shoulder that is adapted to engage a first surface on the first component; and

a second primary locking shoulder that is adapted to engage a second surface on the second component.

In regards to claim 38, Pallini et al disclose at least one of the substantially flat areas is axially positioned between the first and second primary shoulders and laterally offset therefrom.

In regards to claim 39, Pallini et al disclose each of the plurality of locking segments further comprises:

a first secondary shoulder on the locking segment that is adapted to engage a first secondary shoulder on the first component; and

a second secondary shoulder on the locking segment that is adapted to engage a second secondary shoulder on the second component.

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In regards to claim 40, Pallini et al disclose the first primary locking shoulder and the first surface on the first component are tapered surfaces.

In regards to claim 41, Pallini et al disclose the second primary locking shoulder and the second surface on the second component are tapered surfaces.

In regards to claim 42, Pallini et al disclose the locking mandrel comprises a plurality of recesses, each of which is adapted to receive a protrusion on the locking segments when the locking segments are in a disengaged position.

In regards to claim 43, Pallini et al disclose each of the locking segments is comprised of a downwardly facing surface that is adapted to engage an upwardly facing surface on the locking mandrel when the locking mandrel is actuated to disengage the connector.

In regards to claim 44, Pallini et al disclose the locking mandrel is operatively coupled to a primary piston.

In regards to claim 45, Pallini et al disclose a secondary release piston positioned below the primary piston, the secondary release piston adapted to, when actuated, cause the primary piston to move.

In regards to claim 46, Pallini et al disclose a connector, comprising:

a first end adapted to be coupled to a first component;

a plurality of locking segments that, when actuated, are adapted to secure the first component to a second component, wherein each of the plurality of locking segments comprises:

a first primary locking shoulder that is adapted to engage a first surface on the first component, and

a second primary locking shoulder that is adapted to engage a second surface on the second component; and

a locking mandrel that, when actuated, is adapted to engage each of the plurality of locking segments at three discrete, spaced apart, substantially flat engagement areas.

In regards to claim 47, Pallini et al disclose the first end is threadingly coupled to the first component.

In regards to claim 48, Pallini et al disclose the first component is comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.

In regards to claim 49, Pallini et al disclose the second component is comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.

In regards to claim 50, Pallini et al disclose at least one connector rod that is operatively coupled to the locking mandrel and adapted to indicate a position of the locking mandrel.

In regards to claim 51, Pallini et al disclose of the plurality of locking segments further comprises:

a first secondary shoulder on the locking segment that is adapted to engage a first secondary shoulder on the first component; and

a second secondary shoulder on the locking segment that is adapted to engage a second secondary shoulder on the second component.

In regards to claim 52, Pallini et al disclose the first primary locking shoulder and the first surface on the first component are tapered surfaces.

In regards to claim 53, Pallini et al disclose the second primary locking shoulder and the second surface on the second component are tapered surfaces.

In regards to claim 54, Pallini et al disclose the locking mandrel comprises a plurality of recesses, each of which is adapted to receive a protrusion on the locking segments when the locking segments are in a disengaged position.

In regards to claim 55, Pallini et al disclose each of the locking segments is comprised of a downwardly facing surface that is adapted to engage an upwardly facing surface on the locking mandrel when the locking mandrel is actuated to disengage the connector.

In regards to claim 56, Pallini et al disclose the locking mandrel is operatively coupled to a primary piston.

In regards to claim 57, Pallini et al disclose a connector, comprising:  
a first end adapted to be coupled to a first component;  
a plurality of means for securing the first component to a second component; and  
means for engaging each of the means for securing the first component to the second component at least three discrete, spaced apart engagement areas.

In regards to claim 58, Pallini et al disclose the plurality of means for securing the first component to the second component comprises a plurality of locking segments, each of which are adapted to, when actuated, engage the first and second components.

In regards to claim 59, Pallini et al disclose the means for engaging each of the means for securing the first component to the second component comprises a locking mandrel.

In regards to claim 60, Pallini et al disclose a means for actuating the means for engaging each of the plurality of securing means.

In regards to claim 61, Pallini et al disclose the means for actuating the means for engaging comprises a piston operatively coupled to the means for engaging.

In regards to claim 62, Pallini et al disclose a secondary release means for disengaging the means for engaging each of the means for securing the first component to the second component.

In regards to claim 63, Pallini et al disclose the secondary release means comprises a piston.

In regards to claim 64, Pallini et al disclose at least one of the engagement areas is a substantially flat engagement area defined by the engagement of substantially flat surfaces.

In regards to claim 65, Pallini et al disclose all of the engagement areas are substantially flat engagement areas defined by the engagement of substantially flat surfaces.

In regards to claim 66, Pallini et al disclose at least one of the engagement areas is a tapered engagement area defined by the engagement of tapered surfaces.

In regards to claim 67, Pallini et al disclose all of the engagement areas are tapered engagement areas defined by the engagement of tapered surfaces.

In regards to claim 68, Pallini et al disclose the first component is comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.

In regards to claim 69, Pallini et al disclose the second component is comprised of at least one of a blowout preventer, a riser, a production tree, a tubing head and a running tool.

### ***Response to Arguments***

Applicant's arguments filed 3/13/2006 have been fully considered but they are not persuasive. Applicant argues that the rejections are made without any specific record support or citation. The Examiner disagrees. The above rejections are made any specific record support or citation.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the


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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M. Dunwoody whose telephone number is 571-272-7080. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Aaron M Dunwoody  
Primary Examiner  
Art Unit 3679

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